



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/718,743

11/21/2003

Matías Duarte

4676P045

1792

7590 06/19/2007
Thomas C. Webster
Blakely, Sokoloff, Taylor & Zafman LLP
1279 Oakmead Parkway
Sunnyvale, CA 94085

EXAMINER

SHINGLES, KRISTIE D

ART UNIT

PAPER NUMBER

2141

MAIL DATE

DELIVERY MODE

06/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/718,743	Applicant(s) DUARTE ET AL.	
	Examiner Kristie D. Shingles	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10 and 23-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/06</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2141

DETAILED ACTION

Response to Amendments

Claim 29 has been amended.

Claims 3, 11-22 and 31-40 are canceled.

Claims 1, 2, 4-10 and 23-30 are pending.

Response to Arguments

I. Applicant's arguments, see Remarks pages 8-15 filed 3/16/2007, with respect to the rejections of claims 29-30 under 35 U.S.C. 102(e) and claims 1 and 23 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of *Enger et al* (US 2005/0020325), *Lee et al* (US 2005/0107119) and *Finke-Anlauff* (US 6,850,226).

CLAIM REJECTIONS - 35 USC § 102

II. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2141

III. Claims 23 - 28 are rejected under 35 U.S.C. 102(e) as being anticipated by *Enger et al* (US 2005/0020325).

a. **Per claim 23**, *Enger et al* teach a data processing device having a first operational mode and a second operational mode comprising:

- a first group of control elements to perform a first plurality of defined functions within a first physical orientation and to perform a second plurality of defined function with a second physical orientation (*Figures 1 and 2, page 5 paragraphs 0042-0046, page 6 paragraph 0053—altering the functionality of the control elements inputs by switching from a numeric keypad in telephone mode of the portrait orientation to the QWERTY text keypad in PDA mode of the landscape orientation*); and
- a motion sensor to detect the orientation of the data processing device, wherein the data processing device automatically switches from the first operational mode to the second operational mode in response to the motion sensor detecting the data processing device switching from the first physical orientation to the second physical orientation (*page 2 paragraphs 0017-0018, page 3 paragraphs 0028-0031, pages 4-5 paragraphs 0041-0042, 0050-0051—provisions for motion sensing to automatically detect the orientation of the device in order to activate the mode's associated applications*).

b. **Per claim 24**, *Enger et al* teach the data processing device as in claim 23, further comprising: a display render having a first image orientation associated with the first operational mode an to render images having a second image orientation associated with the second operational mode (*Abstract, page 1 paragraphs 0008-0009, page 2 paragraph 0018, pages 3-4 paragraphs 0031-0032, page 5 paragraphs 0044-0046*).

c. **Per claim 25**, *Enger et al* teach the data processing device as in claim 24, wherein the first image orientation is rotated plus or minus 90 degrees with respect to the second image orientation (*page 2 paragraph 0021*).

d. **Claim 26** is substantially similar to claim 25 and is therefore rejected under the same basis.

Art Unit: 2141

e. **Per claim 27**, *Enger et al* teach the data processing device in claim 1, wherein the group of control elements include a first group of glyphs representing the first plurality of defined functions and a second group of glyphs representing the second plurality of defined functions (*Figures 1 and 2, page paragraph 0017, page 5 paragraphs 0042-0046, page 6 paragraph 0053*).

f. **Per claim 28**, *Enger et al* teach the data processing device as in claim 27 wherein the data processing device highlights the first group of glyphs when in the data entry mode and highlights the second group of glyphs when in the telephony mode (*Figures 1 and 2*).

CLAIM REJECTIONS - 35 USC § 103

IV. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

V. **Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Enger et al* (US 2005/0020325) in view of *Lee et al* (US 2005/0107119).**

a. **Per claim 29**, *Enger et al* teach a data processing device comprising:

- a first plurality of control elements associated with a first plurality of functions (*Abstract, page 1 paragraphs 0008-0009, pages 3-4 paragraphs 0031-0032, page 5 paragraphs 0044-0045—control elements associated with functions corresponding to the multiple modes of operation based on the device's multiple configurations—such as portrait, landscape, and closed configurations—causing an adjustment and activation of input drivers, displays and/or software of the device*);
- a second plurality of control elements associated with a second plurality of functions, wherein the second plurality of control elements is hidden from the

Art Unit: 2141

user when the device is in the first orientation and when the device is in the third orientation, and the second plurality of control elements is visible to the user when the device is in the second orientation (*Figure 1, page 2 paragraphs 0017-0018; page 3 paragraph 0029-0032, page 5 paragraphs 0042-0048, 0052—page 6 paragraph 0053; phone mode is associated with the portrait orientation which involves opening the flip cover, activating the numeric keypad, hiding the text/QWERTY keypad characters and formatting the display for portrait view*); and

- a third plurality of control elements associated with a third plurality of functions, wherein the third plurality of control elements is hidden from the user when the device is in the first orientation and when the device is in the second orientation and the third plurality of control elements is visible to the user when the device is in the third orientation (*Figure 2, page 3 paragraph 0029-0032, page 4 paragraph 0035-0036, 0039-0041, page 5 paragraph 0049—in standby mode the flip cover is closed thus hiding the control elements for the modes affiliated with the portrait and landscape orientations; in the PDA mode the text keypad with QWERTY characters is activated, hiding the numeric keypad and formatting the display for landscape view*).

Although *Enger et al* teach additional physical configurations of the device (*page 4 paragraph 0040*), *Enger et al* fail to explicitly teach wherein the first plurality of control elements is visible to the user when the device is in a first orientation, when the device is in a second orientation, and when the device is in a third orientation. However *Lee et al* further teach a portable phone with PDA and gaming modes, wherein the sliding housing of the phone conceals control elements associated particular operative mode and wherein in the control elements of first orientation are also visible in the second and third orientations (*Figures 1, 2, 4-6, page 1 paragraphs 0011-0014, page 2 paragraphs 0025 and 0029, page 3 paragraphs 0039-0044*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Enger et al* and *Lee et al* for the purpose of provisioning control elements of the portable device that are visible to the user in at least three (multiple) orientations of the device—doing so allows for versatility of the control elements by equipping

Art Unit: 2141

them with multiple functions that span the different operative modes; thus preventing overcrowding of the device with excessive single-function control elements operative in only one mode.

b. **Per claim 30**, *Enger et al* and *Lee et al* teach the data processing device of claim 29, *Enger et al* further teach wherein a first operating mode is associated with the first orientation; a second operating mode is associated with the second orientation; and a third operating mode is associated with the third orientation (*Abstract, page 1 paragraphs 0008-0009, page 3 paragraph 0032; Lee et al—Abstract, Figures 1, 2, 4-6, page 1 paragraphs 0011-0014, page 2 paragraphs 0025 and 0029, page 3 paragraphs 0039-0044*).

VI. Claims 1, 2, and 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finke-Anlauff (US 6,850,226) in view of Saarinen (US 6,882,335).

a. **Per claim 1**, *Finke-Anlauff* teaches a data processing device having a first operational mode and a second operational mode, the data processing device comprising:

- a plurality of control elements to perform a first plurality of defined functions when the data processing device is in the first operational mode and to perform a second plurality of defined function when the data processing device is in the second operational mode, wherein (*Figures 1-7, col.1 line 38-col.2 line 3, col.3 line 41-col.4 line 36—provision for control elements that perform specific functions in a telephone mode, PDA mode and camera mode*),
- the first operational mode is associated with a first physical orientation of the data processing device and the plurality of control elements and the second operational mode is associated with a second physical orientation of the data processing device and the plurality of control elements (*Figures 1-7, col.1 line 38-col.2 line 3, col.3 line 41-col.4 line 36—the telephone mode is associated with one sliding orientation of the display screen and the PDA mode is associated with a different sliding orientation of the display screen*).

Finke-Anlauff further teaches an actuation switch that triggers the applications associated with each screen orientation (*col.4 lines 23-37*), yet fails to explicitly teach wherein at least one of the plurality of control elements includes: a first glyph representing a designated one of the first specified functions, the first glyph being highlighted when the data processing device is in the first operational mode and a second glyph representing a designated one of the second specified functions, the second glyph being highlighted when the data processing device is in the second operational mode, wherein the data processing device automatically highlights the first glyph when in the operational mode and automatically highlights the second glyph when in the second operational mode. However, *Saarinen* teaches a graphic symbol or icon associated with the operational mode and orientation of the device, wherein the symbol/icon is activated and displayed in response to the portrait/landscape switching signal corresponding to the portrait/landscape mode of the device (*col.16 lines 5-29, col.5 lines 13-38*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Finke-Anlauff* and *Saarinen* for the purpose of providing mode glyphs/indicators associated with the respective orientation and operating mode of the device; because it displays to the user a mode identification means by visually informing the user (via a symbol/icon/glyph/graphic) of the device's present operating mode.

b. **Per claim 2**, *Finke-Anlauff* and *Saarinen* teach the data processing device as in claim 1, *Finke-Anlauff* further teaches the device further comprising: a display having a viewable display screen for rendering images generated by the data processing device, the display screen rendering images in a first orientation when the data processing device is in the first operational

Art Unit: 2141

mode and rendering images in a second orientation when the data processing device is in the second operational mode (*Figures 1-7; Saarinen— Abstract, col.8 lines 13-35*).

c. **Per claim 4**, *Finke-Anlauff* and *Saarinen* teach the data processing device in claim 1, *Saarinen* further teaches wherein each of the first glyphs are positioned on each of the control elements in a first orientation corresponding to the first orientation of the data processing device and each of the second glyphs are positioned on each of the control elements in a second orientation corresponding to the second orientation of the data processing device (*col.16 lines 5-29, col.5 lines 13-38*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Finke-Anlauff* and *Saarinen* to provide glyphs on control elements since the control elements are multifunctional and have different functions depending on the orientation of the device and depending on the applications that are activated.

d. **Per claim 5**, *Finke-Anlauff* and *Saarinen* teach the data processing device as in claim 4, *Finke-Anlauff* further teaches wherein the first orientation is rotated 90 degrees relative to the second orientation (*Figures 1-7, col.2 line 58-col.3 line 12, col.3 lines 27-34; Saarinen— Figures 2-4, col.8 lines 51-53*).

e. **Per claim 6**, *Finke-Anlauff* and *Saarinen* teach the data processing device as in claim 1, *Finke-Anlauff* further teaches wherein the first operational mode comprise: a data entry mode and wherein the second operational mode comprises a telephony mode wherein the data processing device performs telephony-based functions (*Figures 1-7, col.1 line 38-col.2 line 3, col.2 line 36-47; Saarinen—col.10 lines 34-58*).

Art Unit: 2141

f. **Per claim 7**, *Finke-Anlauff* and *Saarinen* teach the data processing device as in claim 6, *Finke-Anlauff* further teaches wherein when in the telephony mode, the second specified function for a group of the control elements is that of a numeric keyboard for entering telephone numbers (*Figure 1, col.1 lines 59-63, col.3 lines 54-60; Saarinen—col.10 lines 49-51*).

g. **Per claim 8**, *Finke-Anlauff* and *Saarinen* teach the data processing device as in claim 7, *Finke-Anlauff* further teaches wherein, when in the data entry mode, the first specified function for a group of the control elements is that of a cursor control keypad (*Figures 3-4, col.1 lines 38-58, col.2 lines 36-57; Saarinen—col.10 lines 52-55*).

VII. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Finke-Anlauff* (US 6,850,226) in view of *Saarinen* (US 6,882,335) in further view of *Enger et al* (US 2005/0020325).

a. **Per claim 9**, *Finke-Anlauff* and *Saarinen* teach the data processing device as in claim 1 as applied above. *Finke-Anlauff* and *Saarinen* both teach control elements including keyboard/keypad input comprising buttons but both fail to explicitly teach wherein the plurality of control elements includes a control wheel for moving a graphical cursor element when rotated in either the first operational mode and/or the second operational mode. However, *Enger et al* teaches various input types including a trackball, joystick, and/or rotating dials for use in the different operational modes of the device (*page 5-6 paragraph 0052*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Finke-Anlauff* and *Saarinen* with *Enger et al* in order to provide additional control elements for input in order to give the user better control and ease when using the device.

b. **Per claim 10**, *Finke-Anlauff* and *Saarinen* with *Enger et al* teach the data processing apparatus as in claim 9, *Finke-Anlauff* wherein the plurality of control elements

Art Unit: 2141

includes a plurality of keys and/or buttons (*col.3 lines 43-47, col.3 line 64-col.4 line 3, col.4 lines 28-32, col.1 lines 12-34; Saarinen—col.10 lines 34-55; Enger et al—page 5-6 paragraph 0052*).

Conclusion

VIII. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: England (6,483,445), Shkolnikov (7,002,553).


IX. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie D. Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie D. Shingles
Examiner
Art Unit 2141

kds


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER